SEQUENCE LISTING

<110> Booth, Russ
Cahoon, Rebecca E
Hitz, William D
Kinney, Anthony
Yadav, Naren

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Lys Ala His Ser Met Pro Pro Glu Lys Lys Glu Ile Phe Lys Ser Leu
65                  70                  75                  80

Glu Gly Trp Ala Ser Glu Trp Val Leu Pro Leu Leu Lys Pro Val Glu
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Gln Cys Trp Gln Pro Gln Asn Phe Leu Pro Asp Pro Ser Leu Pro His
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Glu Glu Phe Ser His Gln Val Lys Glu Leu Arg Glu Arg Thr Lys Glu
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Asp Ala Leu Pro Thr Tyr Gln Thr Met Ile Asn Asn Leu Asp Gly Val
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Lys Asp Asp Ser Gly Thr Ser Pro Ser Pro Trp Ala Val Trp Thr Arg
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Ala Trp Thr Ala Glu Glu Asn Arg His Gly Asp Leu Leu Arg Thr Tyr
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His Tyr Leu Ile Ser Ala Gly Met Asp Pro Gly Thr Asp Asn Asn Pro
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Tyr Leu Gly Phe Val Tyr Thr Ser Phe Gln Glu Arg Ala Thr Phe Val
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Ala His Gly Asn Thr Ala Arg Leu Ala Lys Glu Gly Gly Asp Pro Val
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Gly Ala Met Val Ala Ile Gly Asn Met Met Glu Lys Lys Ile Thr Met
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Ala Asp Ile Leu Glu Phe Leu Val Glu Arg Trp Arg Leu Glu Lys Leu
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Glu Gly Leu Met ala Glu Gly Lys Arg Ala Gln Asp Phe Val Cys Gly
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Leu Ala Pro Arg Ile Arg Arg Leu Gln Glu Arg Ala Asp Glu Arg Ala
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35 40 45

Cys Arg Ser Ser His Ser Ser Thr Gly Thr Thr Thr Met ala Val Pro
50 55 60

Val Leu Lys Arg Arg Glu Lys Gln Asp Glu Xaa Gln Glu Trp Met Gly
65 70 75 80

Tyr Leu Ala Pro Glu Lys Leu Glu Val Leu Ala His Leu Glu Pro Trp
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Val Gly Ala Pro Ala Ala Arg Ala Arg Val Thr His Ser Met Pro Pro
35 40 45

Glu Lys Ala Glu Val Phe Arg Ser Leu Glu Gly Trp Ala Ala Arg Ser
50 55 60

Leu Leu Pro Leu Leu Lys Pro Val Glu Glu Cys Trp Gln Pro Ala Asp
65 70 75 80

Phe Leu Pro Asp Ser Ser Ser Glu Met Phe Gly His Glu Val Arg Glu
85 90 95

Leu Arg Ala Arg Ala Ala Gly Leu Pro Asp Glu Tyr Phe Val Val Leu
100 105 110

Val Gly Asp Met Val Thr Glu Glu Ala Leu Pro Thr Tyr Gln Thr Met
115 120 125

Ile Asn Thr Leu Asp Gly Val Arg Asp Glu Thr Gly Ala Ser Asn Cys
130 135 140

Pro Trp Ala Val Trp Thr Arg Ala Trp Thr Ala Glu Glu Asn Arg His
145 150 155 160

Gly Asp Ile Leu Gly Lys Tyr Met Tyr Leu Ser Gly Arg Val Asp Met
165 170 175

Arg Met Val Glu Lys Thr Val Gln Tyr Leu Ile Gly Ser Gly Met Asp
180 185 190

Pro Gly Thr Glu Asn Asn Pro Tyr Leu Gly Phe Val Tyr Thr Ser Phe
195 200 205

Gln Glu Arg Ala Thr Ala Val Ser His Gly Asn Thr Ala Arg Leu Pro
210 215 220

Arg Ala His Gly Asp Asp Phe Leu Ala Arg Ala Cys Gly Thr Asn Arg
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35 40 45

His Gly Asn Thr Ala Arg Leu Val Gly Ala Arg Gly His Gly Asp Ala
50 55 60

Ala Leu Ala Arg Val Cys Gly Thr Val Ala Ala Asp Glu Lys Arg His
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Glu Ala Ala Tyr Thr Arg Ile Val Ser Arg Leu Leu Glu Ala Asp Pro
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Ser Ser Ala Arg Thr Arg Val Thr Leu Pro Gln Ile Ile His Trp Arg
        35                  40                  45

Cys Arg Ser Ser His Ser Ser Thr Gly Thr Thr Thr Met Ala Val Pro
    50                  55                  60

Val Leu Lys Arg Arg Glu Lys Gln Asp Glu Glu Gln Glu Trp Met Gly
65                  70                  75                  80

Tyr Leu Ala Pro Glu Lys Leu Glu Val Leu Ala His Leu Glu Pro Trp
                85                  90                  95

Ala Glu Ala His Val Leu Pro Leu Leu Lys Pro Ala Glu Glu Ala Trp
            100                 105                 110

Gln Pro Ser Asp Met Leu Pro Asp Pro Ala Ala Leu Gly Asp Glu Gly
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Phe His Asp Ala Cys Arg Glu Leu Arg Ala Arg Ala Ala Ser Val Pro
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Asp Ala His Leu Val Cys Leu Val Gly Asn Met Ile Thr Glu Glu Ala
145                 150                 155                 160

Leu Pro Thr Tyr Gln Ser Val Pro Asn Arg Phe Glu Ala Val Arg Asp
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Leu Thr Gly Ala Asp Ser Thr Ala Trp Ala Arg Trp Ile Arg Gly Trp
            180                 185                 190

Ser Ala Glu Glu Asn Arg His Gly Asp Ala Leu Ser His Tyr Met Tyr
        195                 200                 205

Leu Ser Gly Arg Val Asp Met Arg Gln Val Asp Arg Thr Val His Arg
    210                 215                 220

Leu Ile Ala Ser Gly Met Ala Met Asn Ala Ala Arg Ser Pro Tyr His
225                 230                 235                 240

Gly Phe Ile Tyr Val Ala Phe Gln Glu Arg Ala Thr Ala Ile Ser His
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Gly Asn Met Ala Arg His Val Gly Ala His Gly Asp His Val Leu Ala
            260                 265                 270
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Arg Val Cys Gly Ala Ile Met Ala Asp Glu Lys Arg His Glu Thr Ala
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Tyr Thr Arg Ile Val Ala Lys Leu Phe Glu Val Asp Pro Asp Ala Ala
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Val Arg Ala Leu Gly Tyr Met Met Arg His Arg Ile Thr Met Pro Ala
305                 310                 315                 320

Ala Leu Met Thr Asp Gly Arg Asp Ala His Leu Tyr Ala His Tyr Ala
                325                 330                 335

Ala Ala Ala Gln Gln Thr Gly Val Tyr Thr Ala Ser Asp Tyr Arg Ser
            340                 345                 350

Ile Leu Glu His Leu Ile Arg Gln Trp Arg Val Glu Glu Leu Ala Ala
        355                 360                 365

Gly Leu Ser Gly Glu Gly Arg Arg Ala Arg Asp Tyr Val Cys Gly Leu
    370                 375                 380

Pro His Lys Ile Arg Arg Met Glu Glu Lys Ala His Asp Arg Ala Ala
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Gln Thr Gln Lys Lys Pro Thr Ser Val Pro Phe Ser Trp Ile Phe Asp
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            20                  25                  30

Val Gly Ala Pro Ala Ala Arg Ala Arg Val Thr His Ser Met Pro Pro
        35                  40                  45

Glu Lys Ala Glu Val Phe Arg Ser Leu Glu Gly Trp Ala Ala Arg Ser
    50                  55                  60

Leu Leu Pro Leu Leu Lys Pro Val Glu Glu Cys Trp Gln Pro Ala Asp
65                  70                  75                  80

Phe Leu Pro Asp Ser Ser Ser Glu Met Phe Gly His Glu Val Arg Glu
                85                  90                  95

Leu Arg Ala Arg Ala Ala Gly Leu Pro Asp Glu Tyr Phe Val Val Leu
            100                 105                 110

Val Gly Asp Met Val Thr Glu Glu Ala Leu Pro Thr Tyr Gln Thr Met
        115                 120                 125

Ile Asn Thr Leu Asp Gly Val Arg Asp Glu Thr Gly Ala Ser Asn Cys
    130                 135                 140

Pro Trp Ala Val Trp Thr Arg Ala Trp Thr Ala Glu Glu Asn Arg His
145                 150                 155                 160

Gly Asp Ile Leu Gly Lys Tyr Met Tyr Leu Ser Gly Arg Val Asp Met
                165                 170                 175

Arg Met Val Glu Lys Thr Val Gln Tyr Leu Ile Gly Ser Gly Met Asp
            180                 185                 190

Pro Gly Thr Glu Asn Asn Pro Tyr Leu Gly Phe Val Tyr Thr Ser Phe
        195                 200                 205

Gln Glu Arg Ala Thr Ala Val Ser His Gly Asn Thr Ala Arg Leu Ala
    210                 215                 220

Arg Ala His Gly Asp Asp Val Leu Ala Arg Ala Cys Gly Thr Ile Ala
225                 230                 235                 240

Ala Asp Glu Lys Arg His Glu Thr Ala Tyr Gly Arg Ile Val Glu Gln
                245                 250                 255

Leu Leu Gln Leu Asp Pro Glu Gly Ala Val Leu Ala Val Ala Asp Met
            260                 265                 270
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Met Arg Lys Arg Ile Thr Met Pro Ala His Leu Met His Asp Gly Arg
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Asp Met Asp Leu Phe Glu His Phe Ala Ala Val Ala Gln Arg Leu Gly
290 295 300

Val Tyr Thr Ala Arg Asp Tyr Ala Asp Ile Val Glu Phe Leu Val Lys
305 310 315 320

Arg Trp Lys Leu Glu Thr Leu Glu Ser Gly Leu Ser Gly Glu Gly Arg
325 330 335

Arg Ala Arg Asp Phe Val Cys Gly Leu Ala Pro Arg Met Arg Arg Ala
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<212> DNA
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agaagaagcc catcagcatc ccgattaatt ggatatttga taggcacgtc agtgtcatgc 660
tgccctaatt taattaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 720
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa 773

<210> 14
<211> 219
<212> PRT
<213> Oryza sativa

<400> 14
Tyr Leu Ser Gly Arg Phe Asp Met Ala Glu Val Glu Arg Ala Val His
1 5 10 15

Arg Leu Ile Arg Ser Gly Met Ala Val Asp Pro Pro Cys Ser Pro Tyr
20 25 30

His Ala Phe Val Tyr Thr Ala Phe Gln Glu Arg Ala Thr Ala Val Ala
35 40 45

```
His Gly Asn Thr Ala Arg Leu Val Gly Ala Arg Gly His Gly Asp Ala
     50                  55                  60

Ala Leu Ala Arg Val Cys Gly Thr Val Ala Ala Asp Glu Lys Arg His
 65                  70                  75                  80

Glu Ala Ala Tyr Thr Arg Ile Val Ser Arg Leu Leu Glu Ala Asp Pro
                 85                  90                  95

Asp Ala Gly Val Arg Ala Val Ala Arg Met Leu Arg Arg Gly Val Ala
            100                 105                 110

Met Pro Thr Ser Pro Ile Ser Asp Gly Arg Arg Asp Asp Leu Tyr Ala
        115                 120                 125

Cys Val Val Ser Leu Ala Glu Gln Ala Gly Thr Tyr Thr Val Ser Asp
    130                 135                 140

Tyr Cys Ser Ile Val Glu His Leu Val Arg Glu Trp Arg Val Glu Glu
145                 150                 155                 160

Leu Ala Ala Gly Leu Ser Gly Glu Gly Arg Arg Ala Arg Asp Tyr Val
                165                 170                 175

Cys Glu Leu Pro Gln Lys Ile Arg Arg Met Lys Glu Lys Ala His Glu
            180                 185                 190

Arg Ala Val Lys Ala Gln Lys Lys Pro Ile Ser Ile Pro Ile Asn Trp
        195                 200                 205

Ile Phe Asp Arg His Val Ser Val Met Leu Pro
    210                 215
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<210> 15
<211> 1318
<212> DNA
<213> Oryza sativa

<400> 15

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gcacgagaac tagctactgt agttgactga cagtgatagt ggcagtcatg caggtcgtgg   60
gaaccgtgcg tgtcagtggc tgcggcgcgg tggtggcgcc ctcgcgccgg cagtgccgcg  120
tgtccgcggc ggtgctgacg gccgcggaga cggcgacggc gacgcggcgc cgcgtgacgc  180
actcgatgcc gccggagaag gcggaggtgt tccggtcgct ggaagggtgg gcgaggtcgt  240
cgctgctgcc gctgctcaag cccgtggagg agtgctggca gccgacggac ttcctgccgg  300
actcgtcgtc ggagatgttc gagcaccagg tccacgagct ccgcgcgcgc gccgcggggc  360
tccccgacga gtacttcgtc gtgctggtcg gggacatgat taccgaggag gcgctgccga  420
cgtaccagac catgatcaac acgctcgacg gcgtccgcga cgagaccggc gccagcgcct  480
gcccctgggc cgtctggacg cgcacctgga ccgccgagga gaaccgccac ggcgacatcc  540
tcggcaagta catgtacctc tccggccgcg tcgacatgcg catggtcgag aagaccgtcc  600
agtacctcat cggctccggc atggatccgg ggacggagaa caacccgtac ctggggttcg  660
tgtacaccag cttccaggag cgcgcgacgg ccgtgtcgca cgggaacacg gcgcgcctcg  720
ccagggcgca cggggacgac gtcctggcgc gcacctgcgg caccatcgcc gccgacgaga  780
agcggcacga gacggcgtac gggcgcatcg tggagcagct gctgcggctc gacccggacg  840
gcgccatgct cgccatcgcc gacatgatgc acaagcggat caccatgccc gcgcacctca  900
tgcacgacgg ccgcgacatg aacctgttcg accacttcgc cgccgtggcg cagcgcctca  960
acgtctacac cgcgcgcgac tacgccgaca tcgtcgagtt cctcgtcaag cggtggaagc 1020
tggagaccct ggagactggg ctctccggcg agggccggag ggcccgggac ttcgtgtgcg 1080
ggctcgcgaa gaggatgcgg cgggccgcgg agcgggctga ggacagggct aagaaggatg 1140
agcagaggaa ggtcaagttc agctggatct atgataggga agtgattgtc tagtttaact 1200
```

tgtcttggtt gaattctgaa ttcccagtcc tagatgatca tgccatttcg ttatcatctc 1260
tgttcttgtg ttctctttgc aatgcagtaa attggtaata aaaaaaaaaa aaaaaaaa 1318

<210> 16
<211> 381
<212> PRT
<213> Oryza sativa

<400> 16

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Met Gln Val Val Gly Thr Val Arg Val Ser Gly Cys Gly Ala Val Val
  1               5                  10                  15

Ala Pro Ser Arg Arg Gln Cys Arg Val Ser Ala Ala Val Leu Thr Ala
            20                  25                  30

Ala Glu Thr Ala Thr Ala Thr Arg Arg Arg Val Thr His Ser Met Pro
        35                  40                  45

Pro Glu Lys Ala Glu Val Phe Arg Ser Leu Glu Gly Trp Ala Arg Ser
    50                  55                  60

Ser Leu Leu Pro Leu Leu Lys Pro Val Glu Glu Cys Trp Gln Pro Thr
65                  70                  75                  80

Asp Phe Leu Pro Asp Ser Ser Ser Glu Met Phe Glu His Gln Val His
                85                  90                  95

Glu Leu Arg Ala Arg Ala Ala Gly Leu Pro Asp Glu Tyr Phe Val Val
            100                 105                 110

Leu Val Gly Asp Met Ile Thr Glu Glu Ala Leu Pro Thr Tyr Gln Thr
        115                 120                 125

Met Ile Asn Thr Leu Asp Gly Val Arg Asp Glu Thr Gly Ala Ser Ala
    130                 135                 140

Cys Pro Trp Ala Val Trp Thr Arg Thr Trp Thr Ala Glu Glu Asn Arg
145                 150                 155                 160

His Gly Asp Ile Leu Gly Lys Tyr Met Tyr Leu Ser Gly Arg Val Asp
                165                 170                 175

Met Arg Met Val Glu Lys Thr Val Gln Tyr Leu Ile Gly Ser Gly Met
            180                 185                 190

Asp Pro Gly Thr Glu Asn Asn Pro Tyr Leu Gly Phe Val Tyr Thr Ser
        195                 200                 205

Phe Gln Glu Arg Ala Thr Ala Val Ser His Gly Asn Thr Ala Arg Leu
    210                 215                 220

Ala Arg Ala His Gly Asp Asp Val Leu Ala Arg Thr Cys Gly Thr Ile
225                 230                 235                 240

Ala Ala Asp Glu Lys Arg His Glu Thr Ala Tyr Gly Arg Ile Val Glu
                245                 250                 255

Gln Leu Leu Arg Leu Asp Pro Asp Gly Ala Met Leu Ala Ile Ala Asp
            260                 265                 270
```

```
Met Met His Lys Arg Ile Thr Met Pro Ala His Leu Met His Asp Gly
        275                 280                 285

Arg Asp Met Asn Leu Phe Asp His Phe Ala Ala Val Ala Gln Arg Leu
    290                 295                 300

Asn Val Tyr Thr Ala Arg Asp Tyr Ala Asp Ile Val Glu Phe Leu Val
305                 310                 315                 320

Lys Arg Trp Lys Leu Glu Thr Leu Glu Thr Gly Leu Ser Gly Glu Gly
                325                 330                 335

Arg Arg Ala Arg Asp Phe Val Cys Gly Leu Ala Lys Arg Met Arg Arg
            340                 345                 350

Ala Ala Glu Arg Ala Glu Asp Arg Ala Lys Lys Asp Glu Gln Arg Lys
        355                 360                 365

Val Lys Phe Ser Trp Ile Tyr Asp Arg Glu Val Ile Val
    370                 375                 380


<210> 17
<211> 384
<212> PRT
<213> Lupinus luteus

<400> 17
Met Gln Ile Gln Thr Cys Tyr Ser Ile Arg Ile Gln Ile Leu Pro Leu
  1               5                  10                  15

Pro Trp Ala Arg Arg Thr Gly Arg His Lys Met Leu Pro Pro Ile Ala
             20                  25                  30

Ala Ile Ser Ala Thr Pro Pro Ser Leu Lys Ser Pro Lys Thr His Ser
         35                  40                  45

Met Pro Pro Glu Lys Ile Glu Ile Phe Lys Ser Leu Glu Ser Trp Ala
     50                  55                  60

Ser Gln Ser Val Leu Pro Leu Leu Lys Pro Val Glu Gln Cys Trp Gln
 65                  70                  75                  80

Pro Gln Glu Phe Val Pro Asp Ser Ser Leu Pro Phe Gly Asp Phe Thr
                85                  90                  95

Asp Gln Val Lys Ala Leu Arg Asp Arg Thr Ala Glu Leu Pro Glu Glu
            100                 105                 110

Tyr Phe Val Val Leu Val Gly Asp Met Ile Thr Glu Asp Ala Leu Pro
        115                 120                 125

Thr Tyr Gln Ser Met Ile Asn Asn Leu Asp Gly Val Arg Asp Glu Thr
    130                 135                 140

Gly Ser Ser Pro Ser Pro Trp Ala Leu Trp Thr Arg Ala Trp Thr Ala
145                 150                 155                 160
```

```
Glu Glu Lys Arg His Gly Asp Leu Leu Arg Thr Tyr Leu Tyr Leu Ser
                165                 170                 175

Gly Arg Val Asp Met Lys Lys Ile Glu Lys Thr Val Gln Tyr Leu Ile
            180                 185                 190

Gly Ser Gly Met Asp Pro Gly Thr Glu Asn Asn Pro Tyr Leu Gly Phe
        195                 200                 205

Val Tyr Thr Ser Phe Gln Glu Arg Ala Thr Phe Val Ser His Gly Asn
    210                 215                 220

Thr Ala Arg Leu Ala Lys Glu Gly Gly Asp Pro Val Leu Ala Arg Ile
225                 230                 235                 240

Cys Gly Thr Ile Ala Ala Asp Glu Lys Arg His Glu Asn Ala Tyr Ser
                245                 250                 255

Arg Ile Val Glu Lys Leu Leu Glu Leu Asp Pro Thr Gly Ala Met Val
            260                 265                 270

Ala Ile Gly Asp Met Met Gln Lys Lys Ile Thr Met Pro Ala His Leu
        275                 280                 285

Met Tyr Asp Gly Glu Asp Pro Lys Leu Phe Asp His Phe Ser Ala Val
    290                 295                 300

Ala Gln Arg Met Gly Val Tyr Thr Ala Asn Asp Tyr Ala Asp Ile Leu
305                 310                 315                 320

Glu Phe Leu Ile Gly Arg Trp Arg Leu Glu Lys Val Gln Asp Leu Lys
                325                 330                 335

Asp Glu Gly Lys Lys Ala Gln Asp Phe Val Cys Gly Leu Ala Pro Arg
            340                 345                 350

Ile Arg Arg Leu Gln Glu Arg Ala Asp Glu Arg Ala Arg Lys Met Lys
        355                 360                 365

Pro His Ala Val Lys Phe Ser Trp Ile Phe Asn Lys Glu Ile Ile Leu
    370                 375                 380
```

<210> 18
<211> 396
<212> PRT
<213> Cucumis sativus

<400> 18

```
Met Ala Leu Lys Phe His Pro Leu Thr Ser Gln Ser Pro Lys Leu Pro
  1               5                  10                  15

Ser Phe Arg Met Pro Gln Leu Ala Ser Leu Arg Ser Pro Lys Phe Val
            20                  25                  30

Met Ala Ser Thr Leu Arg Ser Thr Ser Arg Glu Val Glu Thr Leu Lys
        35                  40                  45

Lys Pro Phe Met Pro Pro Arg Glu Val His Leu Gln Val Thr His Ser
    50                  55                  60
```

Met Pro Pro Gln Lys Met Glu Ile Phe Lys Ser Leu Glu Asp Trp Ala
65 70 75 80

Glu Glu Asn Leu Leu Val His Leu Lys Pro Val Glu Arg Cys Trp Gln
85 90 95

Pro Gln Asp Phe Leu Pro Asp Ser Ala Phe Glu Gly Phe His Glu Gln
100 105 110

Val Arg Glu Leu Arg Glu Arg Ala Lys Glu Leu Pro Asp Glu Tyr Phe
115 120 125

Val Val Leu Val Gly Asp Met Ile Thr Glu Glu Ala Leu Pro Thr Tyr
130 135 140

Gln Thr Met Leu Asn Thr Leu Asp Gly Val Arg Asp Glu Thr Gly Ala
145 150 155 160

Ser Pro Thr Pro Trp Ala Ile Trp Thr Arg Ala Trp Thr Ala Glu Glu
165 170 175

Asn Arg His Gly Asp Leu Leu Asn Lys Tyr Leu Tyr Leu Ser Gly Arg
180 185 190

Val Asp Met Arg Gln Val Glu Lys Thr Ile Gln Tyr Leu Ile Gly Ser
195 200 205

Gly Met Asp Pro Arg Thr Glu Asn Asn Pro Tyr Leu Gly Phe Ile Tyr
210 215 220

Thr Ser Phe Gln Glu Arg Ala Thr Phe Ile Ser His Gly Asn Thr Ala
225 230 235 240

Arg Leu Ala Lys Glu His Gly Asp Ile Lys Leu Ala Gln Ile Cys Gly
245 250 255

Thr Ile Thr Ala Asp Glu Lys Arg His Glu Thr Ala Tyr Thr Lys Ile
260 265 270

Val Glu Lys Leu Phe Glu Ile Asp Pro Glu Gly Thr Val Ile Ala Phe
275 280 285

Glu Glu Met Met Arg Lys Lys Val Ser Met Pro Ala His Leu Met Tyr
290 295 300

Asp Gly Arg Asp Asp Asn Leu Phe His His Phe Ser Ala Val Ala Gln
305 310 315 320

Arg Leu Gly Val Tyr Thr Ala Lys Asp Tyr Ala Asp Ile Leu Glu Phe
325 330 335

Leu Val Gly Arg Trp Lys Val Glu Ser Leu Thr Gly Leu Ser Gly Glu
340 345 350

Gly Gln Lys Ala Gln Asp Tyr Val Cys Ala Leu Pro Ala Arg Ile Arg
355 360 365

Lys Leu Glu Glu Arg Ala Gln Gly Arg Ala Lys Glu Gly Pro Thr Ile
370 375 380

```
Pro Phe Ser Trp Ile Phe Asp Arg Gln Val Lys Leu
385                 390                 395


<210> 19
<211> 374
<212> PRT
<213> Arabidopsis thaliana

<400> 19
Met Pro Ser Pro Ser Thr Phe Leu Ala Ser Arg Pro Arg Gly Pro Ala
  1               5                  10                  15

Lys Ile Ser Ala Val Ala Ala Pro Val Arg Pro Ala Leu Lys His Gln
            20                  25                  30

Asn Lys Ile His Thr Met Pro Pro Glu Lys Met Glu Ile Phe Lys Ser
        35                  40                  45

Leu Asp Gly Trp Ala Lys Asp Gln Ile Leu Pro Leu Leu Lys Pro Val
    50                  55                  60

Asp Gln Cys Trp Gln Pro Ala Ser Phe Leu Pro Asp Pro Ala Leu Pro
65                  70                  75                  80

Phe Ser Glu Phe Thr Asp Gln Val Arg Glu Leu Arg Glu Arg Thr Ala
                85                  90                  95

Ser Leu Pro Asp Glu Tyr Phe Val Val Leu Val Gly Asp Met Ile Thr
            100                 105                 110

Glu Asp Ala Leu Pro Thr Tyr Gln Thr Met Ile Asn Thr Leu Asp Gly
        115                 120                 125

Val Arg Asp Glu Thr Gly Ala Ser Glu Ser Ala Trp Ala Ser Trp Thr
    130                 135                 140

Arg Ala Trp Thr Ala Glu Glu Asn Arg His Gly Asp Leu Leu Arg Thr
145                 150                 155                 160

Tyr Leu Tyr Leu Ser Gly Arg Val Asp Met Leu Met Val Glu Arg Thr
                165                 170                 175

Val Gln His Leu Ile Gly Ser Gly Met Asp Pro Gly Thr Glu Asn Asn
            180                 185                 190

Pro Tyr Leu Gly Phe Val Tyr Thr Ser Phe Gln Glu Arg Ala Thr Phe
        195                 200                 205

Val Ser His Gly Asn Thr Ala Arg Leu Ala Lys Ser Ala Gly Asp Pro
    210                 215                 220

Val Leu Ala Arg Ile Cys Gly Thr Ile Ala Ala Asp Glu Lys Arg His
225                 230                 235                 240

Glu Asn Ala Tyr Val Arg Ile Val Glu Lys Leu Leu Glu Ile Asp Pro
                245                 250                 255
```

Asn Gly Ala Val Ser Ala Val Ala Asp Met Met Arg Lys Lys Ile Thr
260 265 270

Met Pro Ala His Leu Met Thr Asp Gly Arg Asp Pro Met Leu Phe Glu
275 280 285

His Phe Ser Ala Val Ala Gln Arg Leu Glu Val Tyr Thr Ala Asp Asp
290 295 300

Tyr Ala Asp Ile Leu Glu Phe Leu Val Gly Arg Trp Arg Leu Glu Lys
305 310 315 320

Leu Glu Gly Leu Thr Gly Glu Gly Gln Arg Ala Gln Glu Phe Val Cys
325 330 335

Gly Leu Ala Gln Arg Ile Arg Arg Leu Gln Glu Arg Ala Asp Glu Arg
340 345 350

Ala Lys Lys Leu Lys Lys Thr His Glu Val Cys Phe Ser Trp Ile Phe
355 360 365

Asp Lys Gln Ile Ser Val
370

<210> 20
<211> 398
<212> PRT
<213> Simmondsia chinensis

<400> 20
Met Ala Leu Lys Leu His His Thr Ala Phe Asn Pro Ser Met Ala Val
1 5 10 15

Thr Ser Ser Gly Leu Pro Arg Ser Tyr His Leu Arg Ser His Arg Val
20 25 30

Phe Met Ala Ser Ser Thr Ile Gly Ile Thr Ser Lys Glu Ile Pro Asn
35 40 45

Ala Lys Lys Pro His Met Pro Pro Arg Glu Ala His Val Gln Lys Thr
50 55 60

His Ser Met Pro Pro Gln Lys Ile Glu Ile Phe Lys Ser Leu Glu Gly
65 70 75 80

Trp Ala Glu Glu Asn Val Leu Val His Leu Lys Pro Val Glu Lys Cys
85 90 95

Trp Gln Pro Gln Asp Phe Leu Pro Asp Pro Ala Ser Glu Gly Phe Met
100 105 110

Asp Gln Val Lys Glu Leu Arg Glu Arg Thr Lys Glu Ile Pro Asp Glu
115 120 125

Tyr Leu Val Val Leu Val Gly Asp Met Ile Thr Glu Glu Ala Leu Pro
130 135 140

Thr Tyr Gln Thr Met Leu Asn Thr Leu Asp Gly Val Arg Asp Glu Thr
145 150 155 160

Gly Ala Ser Leu Thr Ser Trp Ala Ile Trp Thr Arg Ala Trp Thr Ala
165 170 175

Glu Glu Asn Arg His Gly Asp Leu Leu Asn Lys Tyr Leu Tyr Leu Thr
180 185 190

Gly Arg Val Asp Met Lys Gln Ile Glu Lys Thr Ile Gln Tyr Leu Ile
195 200 205

Gly Ser Gly Met Asp Pro Arg Ser Glu Asn Asn Pro Tyr Leu Gly Phe
210 215 220

Ile Tyr Thr Ser Phe Gln Glu Arg Ala Thr Phe Ile Ser His Gly Asn
225 230 235 240

Thr Ala Arg Leu Ala Lys Asp His Gly Asp Phe Gln Leu Ala Gln Val
245 250 255

Cys Gly Ile Ile Ala Ala Asp Glu Lys Arg His Glu Thr Ala Tyr Thr
260 265 270

Lys Ile Val Glu Lys Leu Phe Glu Ile Asp Pro Asp Gly Ala Val Leu
275 280 285

Ala Leu Ala Asp Met Met Arg Lys Lys Val Ser Met Pro Ala His Leu
290 295 300

Met Tyr Asp Gly Lys Asp Asp Asn Leu Phe Glu Asn Tyr Ser Ala Val
305 310 315 320

Ala Gln Gln Ile Gly Val Tyr Thr Ala Lys Asp Tyr Ala Asp Ile Leu
325 330 335

Glu His Leu Val Asn Arg Trp Lys Val Glu Asn Leu Met Gly Leu Ser
340 345 350

Gly Glu Gly His Lys Ala Gln Asp Phe Val Cys Gly Leu Ala Pro Arg
355 360 365

Ile Arg Lys Leu Gly Glu Arg Ala Gln Ser Leu Ser Lys Pro Val Ser
370 375 380

Leu Val Pro Phe Ser Trp Ile Phe Asn Lys Glu Leu Lys Val
385 390 395

<210> 21
<211> 411
<212> PRT
<213> Arabidopsis thaliana

<400> 21
Met Ala Leu Leu Leu Asn Ser Thr Ile Thr Val Ala Met Lys Gln Asn
1 5 10 15

Pro Leu Val Ala Val Ser Phe Pro Arg Thr Thr Cys Leu Gly Ser Ser
20 25 30

Phe Ser Pro Pro Arg Leu Leu Arg Val Ser Cys Val Ala Thr Asn Pro
35 40 45

Ser Lys Thr Ser Glu Glu Thr Asp Lys Lys Lys Phe Arg Pro Ile Lys
50 55 60

Glu Val Pro Asn Gln Val Thr His Thr Ile Thr Gln Glu Lys Leu Glu
65 70 75 80

Ile Phe Lys Ser Met Glu Asn Trp Ala Gln Glu Asn Leu Leu Ser Tyr
85 90 95

Leu Lys Pro Val Glu Ala Ser Trp Gln Pro Gln Asp Phe Leu Pro Glu
100 105 110

Thr Asn Asp Glu Asp Arg Phe Tyr Glu Gln Val Lys Glu Leu Arg Asp
115 120 125

Arg Thr Lys Glu Ile Pro Asp Asp Tyr Phe Val Val Leu Val Gly Asp
130 135 140

Met Ile Thr Glu Glu Ala Leu Pro Thr Tyr Gln Thr Thr Leu Asn Thr
145 150 155 160

Leu Asp Gly Val Lys Asp Glu Thr Gly Gly Ser Leu Thr Pro Trp Ala
165 170 175

Val Trp Val Arg Ala Trp Thr Ala Glu Glu Asn Arg His Gly Asp Leu
180 185 190

Leu Asn Lys Tyr Leu Tyr Leu Ser Gly Arg Val Asp Met Arg His Val
195 200 205

Glu Lys Thr Ile Gln Tyr Leu Ile Gly Ser Gly Met Asp Ser Lys Phe
210 215 220

Glu Asn Asn Pro Tyr Asn Gly Phe Ile Tyr Thr Ser Phe Gln Glu Arg
225 230 235 240

Ala Thr Phe Ile Ser His Gly Asn Thr Ala Lys Leu Ala Thr Thr Tyr
245 250 255

Gly Asp Thr Thr Leu Ala Lys Ile Cys Gly Thr Ile Ala Ala Asp Glu
260 265 270

Lys Arg His Glu Thr Ala Tyr Thr Arg Ile Val Glu Lys Leu Phe Glu
275 280 285

Ile Asp Pro Asp Gly Thr Val Gln Ala Leu Ala Ser Met Met Arg Lys
290 295 300

Arg Ile Thr Met Pro Ala His Leu Met His Asp Gly Arg Asp Asp Asp
305 310 315 320

Leu Phe Asp His Tyr Ala Ala Val Ala Gln Arg Ile Gly Val Tyr Thr
325 330 335

Ala Thr Asp Tyr Ala Gly Ile Leu Glu Phe Leu Leu Arg Arg Trp Glu
340 345 350

```
Val Glu Lys Leu Gly Met Gly Leu Ser Gly Glu Gly Arg Arg Ala Gln
        355                 360                 365

Asp Tyr Leu Cys Thr Leu Pro Gln Arg Ile Arg Arg Leu Glu Glu Arg
    370                 375                 380

Ala Asn Asp Arg Val Lys Leu Ala Ser Lys Ser Lys Pro Ser Val Ser
385                 390                 395                 400

Phe Ser Trp Ile Tyr Gly Arg Glu Val Glu Leu
                405                 410
```

<210> 22
<211> 396
<212> PRT
<213> Linum usitatissimum

<400> 22

```
Met Ala Leu Lys Leu Asn Pro Val Thr Thr Phe Pro Ser Thr Arg Ser
  1               5                  10                  15

Leu Asn Asn Phe Ser Ser Arg Ser Pro Arg Thr Phe Leu Met Ala Ala
            20                  25                  30

Ser Thr Phe Asn Ser Thr Ser Thr Lys Glu Ala Glu Lys Leu Lys Lys
        35                  40                  45

Ser His Gly Pro Pro Lys Glu Val His Met Gln Val Thr His Ser Met
    50                  55                  60

Pro Pro Gln Lys Leu Glu Ile Phe Lys Ser Leu Glu Gly Trp Ala Glu
65                  70                  75                  80

Asp Val Leu Leu Pro His Leu Lys Pro Val Glu Lys Cys Trp Gln Pro
                85                  90                  95

Gln Asp Phe Leu Pro Glu Pro Glu Ser Asp Gly Phe Glu Glu Gln Val
            100                 105                 110

Lys Glu Leu Arg Ala Arg Ala Lys Glu Leu Pro Asp Asp Tyr Phe Val
        115                 120                 125

Val Leu Val Gly Asp Met Ile Thr Glu Glu Ala Leu Pro Thr Tyr Gln
    130                 135                 140

Thr Met Leu Asn Thr Leu Asp Gly Val Arg Asp Glu Thr Gly Ala Ser
145                 150                 155                 160

Leu Thr Pro Trp Ala Ile Trp Thr Arg Ala Trp Thr Ala Glu Glu Asn
                165                 170                 175

Arg His Gly Asp Leu Leu Asn Lys Tyr Leu Tyr Leu Ser Gly Arg Val
            180                 185                 190

Asp Met Arg Gln Ile Glu Lys Thr Ile Gln Tyr Leu Ile Gly Ser Gly
        195                 200                 205

Met Asp Pro Lys Thr Glu Asn Asn Pro Tyr Leu Gly Phe Ile Tyr Thr
    210                 215                 220
```

Ser Phe Gln Glu Arg Ala Thr Phe Ile Ser His Gly Asn Thr Ala Arg
225 230 235 240

Leu Ala Lys Asp His Gly Asp Met Lys Leu Ala Gln Ile Cys Gly Ile
245 250 255

Ile Ala Ala Asp Glu Lys Arg His Glu Thr Ala Tyr Thr Lys Ile Val
260 265 270

Glu Lys Leu Phe Glu Ile Asp Pro Asp Gly Thr Val Leu Ala Leu Ala
275 280 285

Asp Met Met Arg Lys Lys Ile Ser Met Pro Ala His Leu Met Tyr Asp
290 295 300

Gly Glu Asp Asp Asn Leu Phe Asp Asn Tyr Ser Ser Val Ala Gln Arg
305 310 315 320

Ile Gly Val Tyr Thr Ala Lys Asp Tyr Ala Asp Ile Leu Glu Phe Leu
325 330 335

Val Gly Arg Trp Lys Val Asp Ala Phe Thr Gly Leu Ser Gly Glu Gly
340 345 350

Asn Lys Ala Gln Asp Phe Val Cys Gly Leu Pro Ala Arg Ile Arg Lys
355 360 365

Leu Glu Glu Arg Ala Ala Gly Arg Ala Lys Gln Thr Ser Lys Ser Val
370 375 380

Pro Phe Ser Trp Ile Phe Ser Arg Glu Leu Val Leu
385 390 395

<210> 23
<211> 391
<212> PRT
<213> Glycine max

<400> 23
Met ala Leu Arg Leu Asn Pro Ile Pro Thr Gln Thr Phe Ser Leu Pro
1 5 10 15

Gln Met Pro Ser Leu Arg Ser Pro Arg Phe Arg Met ala Ser Thr Leu
20 25 30

Arg Ser Gly Ser Lys Glu Val Glu Asn Ile Lys Lys Pro Phe Thr Pro
35 40 45

Pro Arg Glu Val His Val Gln Val Thr His Ser Met Pro Pro Gln Lys
50 55 60

Ile Glu Ile Phe Lys Ser Leu Glu Asp Trp Ala Asp Gln Asn Ile Leu
65 70 75 80

Thr His Leu Lys Pro Val Glu Lys Cys Trp Gln Pro Gln Asp Phe Leu
85 90 95

Pro Asp Pro Ser Ser Asp Gly Phe Glu Glu Gln Val Lys Glu Leu Arg
100 105 110

Glu Arg Ala Lys Glu Ile Pro Asp Asp Tyr Phe Val Val Leu Val Gly
115 120 125

Asp Met Ile Thr Glu Glu Ala Leu Pro Thr Tyr Gln Thr Met Leu Asn
130 135 140

Thr Leu Asp Gly Val Arg Asp Glu Thr Gly Ala Ser Leu Thr Ser Trp
145 150 155 160

Ala Ile Trp Thr Arg Ala Trp Thr Ala Glu Glu Asn Arg His Gly Asp
165 170 175

Leu Leu Asn Lys Tyr Leu Tyr Leu Ser Gly Arg Val Asp Met Lys Gln
180 185 190

Ile Glu Lys Thr Ile Gln Tyr Leu Ile Gly Ser Gly Met Asp Pro Arg
195 200 205

Thr Glu Asn Ser Pro Tyr Leu Gly Phe Ile Tyr Thr Ser Phe Gln Glu
210 215 220

Arg Ala Thr Phe Ile Ser His Gly Asn Thr Ala Arg Leu Ala Lys Glu
225 230 235 240

His Gly Asp Ile Lys Leu Ala Gln Ile Cys Gly Met Ile Ala Ser Asp
245 250 255

Glu Lys Arg His Glu Thr Ala Tyr Thr Lys Ile Val Glu Lys Leu Phe
260 265 270

Glu Val Asp Pro Asp Gly Thr Val Met ala Phe Ala Asp Met Met Arg
275 280 285

Lys Lys Ile Ala Met Pro Ala His Leu Met Tyr Asp Gly Arg Asp Asp
290 295 300

Asn Leu Phe Asp Asn Tyr Ser Ala Val Ala Gln Arg Ile Gly Val Tyr
305 310 315 320

Thr Ala Lys Asp Tyr Ala Asp Ile Leu Glu Phe Leu Val Gly Arg Trp
325 330 335

Lys Val Glu Gln Leu Thr Gly Leu Ser Gly Glu Gly Arg Lys Ala Gln
340 345 350

Glu Tyr Val Cys Gly Leu Pro Pro Arg Ile Arg Arg Leu Glu Glu Arg
355 360 365

Ala Gln Ala Arg Gly Lys Glu Ser Ser Thr Leu Lys Phe Ser Trp Ile
370 375 380

His Asp Arg Glu Val Leu Leu
385 390

<210> 24
<211> 80

<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: ELVISLIVES complementary region of pKS106 and pKS124

<400> 24
cggccggagc tggtcatctc gctcatcgtc gagtcggcgg ccgccgactc gacgatgagc 60
gagatgacca gctccggccg 80

<210> 25
<211> 154
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: ELVISLIVES complementary region of pKS133

<400> 25
cggccggagc tggtcatctc gctcatcgtc gagtcggcgg ccggagctgg tcatctcgct 60
catcgtcgag tcggcggccg ccgactcgac gatgagcgag atgaccagct ccggccgccg 120
actcgacgat gagcgagatg accagctccg gccg 154

<210> 26
<211> 6611
<212> DNA
<213> Plasmid pBS68

<220>
<221> Unsure
<222> (4436)..(4436)
<223> n = A, C, G, or T

<400> 26
cgcgcctatg cgggaccatc gcagcggacg agaagcggca cgagaacgcg tactcaagaa 60
tcgtggagaa gcttctggaa gtggacccca ccggggcaat ggtggccata gggaacatga 120
tggagaagaa gatcacgatg ccggcgcacc ttatgtacga tggggatgac cccaggctat 180
tcgagcacta ctccgctgtg gcgcagcgca taggcgtgta caccgccaac gactacgcag 240
acatcttgga tttctcgttg acggtgaaga ttggagaagc ttgaaggatt gatgcctgag 300
gggaagcggg ccccaggatt tccgtgtgtg ggttgccccc gaggattagg aggttccaag 360
aacgcgctga tgagcgagcg cgtaagatga agaagcatca tgccgttaag ttcagttgga 420
ttttcaataa agaattgctt ttgtgagcgg ccgccgactc gacgatgagc gagatgacca 480
gctccggccg ccgactcgac gatgagcgag atgaccagct ccggccgcga cacaagtgtg 540
agagtactaa ataaatgctt tggttgtacg aaatcattac actaaataaa ataatcaaag 600
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